

Wharfedale SW 380 Subwoofer User Guide

TROUBLESHOOTING

If your system is not working properly please work through this checklist before returning a unit to your dealer. Before investigating a problem, always switch off the system at the mains.

Symptom	Possible Cause
No Sound	System not switched on; Speaker cables shorting terminals out; Wrong source selected
Sound lacks bass content Bass reproduction indistinct	Subwoofer not switched on; Subwoofer phase incorrect; Subwoofer crossover control too low
Excessive bass distortion at low volumes	Subwoofer level set too high; LFE level set too high; Subwoofer incorrectly wired
Excessive or distorted bass at high levels	System level set too high; Bass control set too high; Subwoofer too close to room corners
Distorted or rattling sounds at high levels	System level set too high; Objects placed on subwoofer; Objects too close to subwoofer
Subwoofer will not respond to commands	Handset batteries weak; handset too far away; line of sight is impeded
Popping or thumping from the subwoofer	System level set too high; Subwoofer level set too high; LFE level set too high
Indistinct sound; Poor localisation of effects. Poor localisation of dialogue	One or more loudspeakers is out of phase (Read the manual for correct connection procedure)
Television picture colour is distorted	Subwoofer too close to TV. (Switch off system and TV. Move units away. Leave 15 mins. Switch on)

SPECIFICATIONS

	SW 380 Subwoofer
Drive Unit	380mm diameter (15")
Amplifier Power	600 watts
Input Impedance (Line input)	10kΩ
Low Pass Filter Range	35 - 85 Hz + Bypass
Frequency Response (Boundary position)	25 - 90 Hz (-6dB)
Phase Adjustment	0° - 180° switchable
Maximum SPL (ref 1m)	120 dB
Dimensions Overall	
H x W x D mm	570 x 465 x 570
H x W x D inches	22.5 x 18.3 x 22.5

Performance and specifications subject to alteration

AUTHORISED SERVICE CENTRES

UK	USA	CANADA
Wharfedale International Ltd. IAG House, Sovereign Court, Ermine Business Park, Huntingdon, Cambs PE29 6XU, England. Tel:+44 (0)1480 447700 Fax: +44 (0)1480 43176	IAG America, Inc. 15 Walpole Park South Walpole MA 02081	Korbon Trading Ltd 6800 Kitimat Road Units 19-20 Mississauga Ontario Tel: +1 905 567 1920

For information on other authorised service centres worldwide contact

Wharfedale International in the U.K.

A worldwide distributor list is available on the Wharfedale website:

www.wharfedale.co.uk

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Wharfedale has a policy of continuous product development and reserves the right to change specification without notice.

Wharfedale is a member of the International Audio Group.

SW 380

Powered Subwoofer

Instruction Manual



Wharfedale
BRITAIN'S MOST FAMOUS LOUDSPEAKERS

Wharfedale

S380man Iss 1 0904

COMPLIANCE

This Wharfedale product complies with the relevant clauses enshrined in the following standards and directives in force at the time of the introduction of the product.

- **EU Directives:** 89/336/EC, 72/23/EEC: **Safety:** EN60065 (CB Scheme); **Emissions:** EN55013, EN61000 **Immunity:** EN55020:2002. 
- **USA:** UL 6500:2002. Approved under the verification provision of FCC Part 15 as a Class B Digital Device.
- **CANADA:** CAN/CSA-E60065-00

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IMPORTANT SAFETY INFORMATION

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with dry cloth.

Do not block any ventilation openings.

Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Use only attachments/accessories specified by the manufacturer.

 Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning: To reduce the risk of fire or electrical shock, do not expose this product to rain or moisture. The product must not be exposed to dripping and splashing and no object filled with liquids such as a vase of flowers should be placed on the product.

No naked flame sources such as candles should be placed on the product.

Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device.

Warning: The mains power switch for this appliance is located on the rear panel. To permit free access to this switch, the apparatus must be located in an open area without any obstructions.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause

GENERAL GUIDANCE

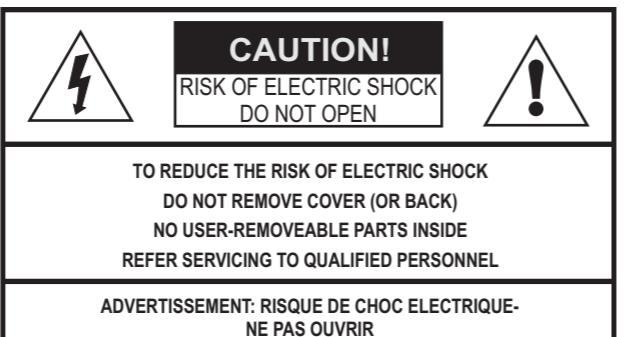
DO NOT connect the mains power to any signal input terminal on the subwoofer Control Panel.

DO NOT change any connections to the subwoofer without first switching off the power to all the components in your AV system. ALWAYS turn down the volume control on your amplifier or receiver before turning the equipment on or off.

DO NOT use your amplifier at its maximum volume setting. The resulting

harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

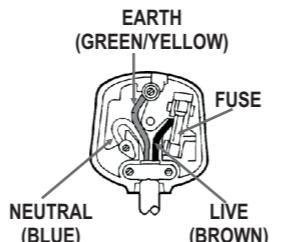
ESSENTIAL INFORMATION FOR UK USERS

The power cord on your subwoofer may be supplied with a plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA or BSI approved BS1362 fuse must be used of the same rating. If the plug is cut off it must NOT be re-used. Dispose of any such plug safely. There is a danger of electric shock if a cut-off plug is inserted into a mains socket.

The wires in the mains lead are coloured in accordance with the following code: Green and Yellow - Earth: Blue - Neutral: Brown - Live.

As the colours of the wires in the mains lead may not correspond with the markings identifying the terminals in the replacement mains plug, proceed as follows:

The wire coloured Blue must be connected to the terminal marked with the letter "N" or coloured Black. The wire coloured Brown must be connected to the terminal marked with the letter "L" or coloured Red. The wire coloured Green and Yellow must be connected to the terminal marked with the letter 'E', or coloured Green, or Green and Yellow, or marked with the Earth symbol .



distortion may damage your loudspeakers and subwoofer. The position of the Volume Control on your amplifier is NOT a reliable guide as to 'how loud' your equipment will play. Allow your system ample 'headroom'.

Do not operate your subwoofer closer than 450mm from the TV to avoid distorting the colour picture. If this occurs, switch the TV set off. After 15 minutes switch on again: colour balance should now be restored.

To minimise hum and mains interference ensure that low level (line level) signal cables are well screened. Avoid routing low-level signal cables close to or parallel with mains power wiring.

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SETTING UP TWO SUBWOOFERS

General notes

Site the subwoofers so that they enhance the system bass response but do not cancel each other out.

- A well-sited pair of subwoofers for stereo applications will be adequately sited for Home Cinema applications.
- A second subwoofer raises the bass output level 6dB when operating in Home Cinema but not in Stereo.
- Both subwoofers should be in line of sight to the listening seat as both answer to one remote handset.
- When operating two subwoofers, do all setups and operations on one handset. When allocating presets make sure that the same preset (e.g. Home Cinema on preset 1) is allocated to each subwoofer.

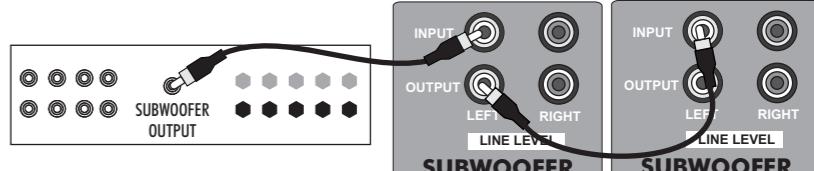
Home Cinema:

- As AV Processors produce a common subwoofer channel, considerations of Left and Right do not apply, but with spaced subwoofers each helps to fill in the troughs caused by in-room standing waves, smoothing the bass and giving the sound greater intensity, 'air' and depth.
- Set up the position of each subwoofer separately with the other one switched off. After you have set both subwoofers up, reduce the front panel volume level of each subwoofer by 3 points. Complete the final adjustment with both subwoofers switched on. You may need to make some small adjustments to the position of each sub for best results. We suggest you enter this final setting as a Home Cinema preset.

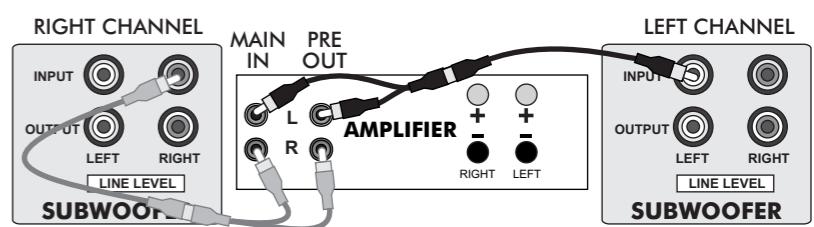
Stereo:

- Each subwoofer should be located as near as possible to its partnering loudspeaker. The smaller the main speakers, the more necessary this becomes.
- It is easier to set up each subwoofer with a mono source playing through one channel with the other channel turned off.
- Complete the adjustment by ear using a mono source with both channels and subwoofers operational. We suggest you enter this setting as a Stereo preset.

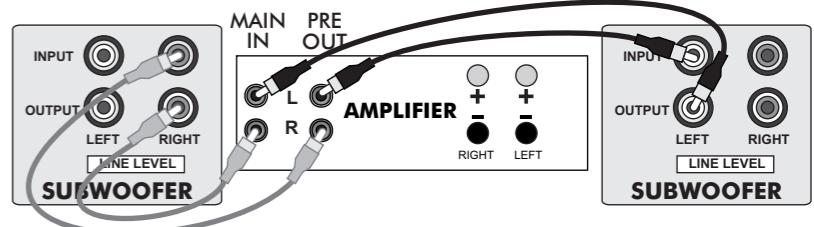
HOME CINEMA LINE CONNECTION



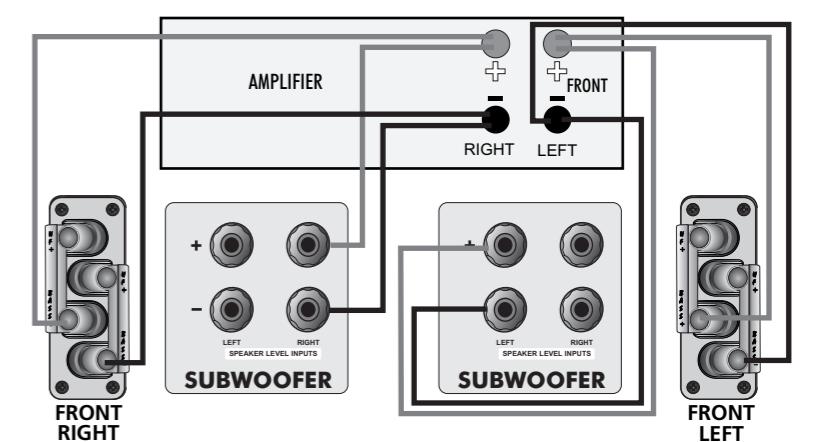
STEREO LINE CONNECTION A



STEREO LINE CONNECTION B



HIGH LEVEL SPEAKER CONNECTION



CARE AND MAINTENANCE

The loudspeaker cabinets can be cleaned with a damp cloth or with a spray furniture polish and a soft cloth. Apply the spray sparingly to the cloth and then polish the cabinet. Never apply spray directly to the cabinet.

GUARANTEE & SERVICE

In the unlikely event that your unit develops a fault you should return it to

your Wharfedale dealer using the original packing to ensure safe shipping.

The terms of your guarantee may vary from country to country but in all locations the guarantee excludes:

All damage caused through accident, misuse, wear and tear, neglect, incorrect installation, adjustment or repair by unauthorised personnel.

Liability for damage or loss occurring in transit to or from the purchaser.

Wharfedale will not be liable for any consequential damage, loss or injury, arising from or in conjunction with this equipment.

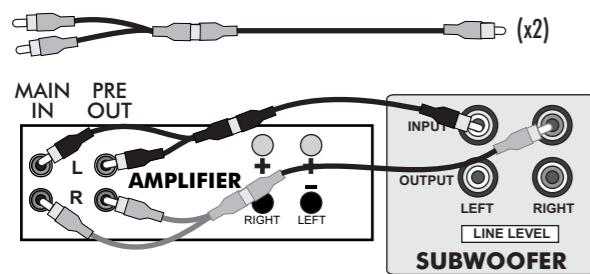
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Pre Out - Main In Connections

If you use a separate stereo pre and power amplifier, or an amplifier where the pre and main amplifier can be separated, connect the subwoofer as shown. There are two alternative methods.

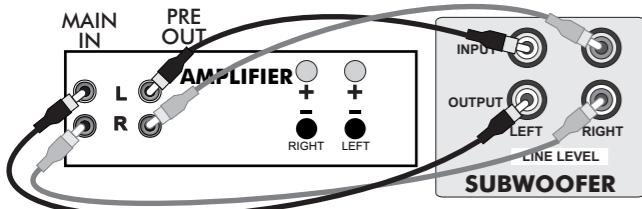
A: You will need two screened RCA 'Y' adaptors and two single RCA phono cables.

Remove the Pre-Main links on your amplifier. Connect the socket (common) of an RCA 'Y' adaptor to one of the mono cables. Connect one leg of the 'Y' adaptor to the Left Channel Pre Out socket on the amplifier and the other leg to the Left Channel Main In socket. Connect the remaining plug of this combination to the Left Channel Line Level Input on the sub-woofer. Repeat this for the Right Channel.



B: You will need two stereo (or four single) screened RCA cables.

Connect a Stereo cable from the Line Level Inputs of the sub-woofer to the Pre Out sockets of the amplifier. Now connect a second Stereo cable from the Line Level Outputs of the sub-woofer to the Main In sockets of the amplifier. Make sure that the Right and Left Channels are not mixed up! The sub-woofer is now inserted within the system loop.



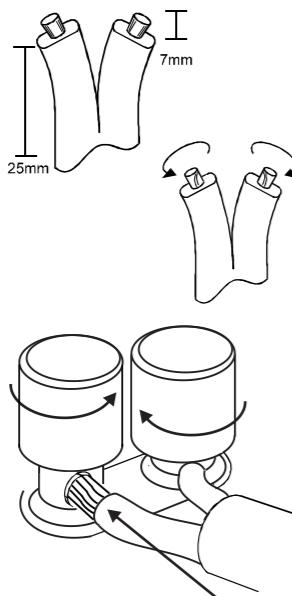
Speaker Level Connections

The high level Speaker connections should be used only if your amplifier does not have a line level subwoofer output. In this connection the subwoofer is fed together with the Front loudspeakers. For this you will need two extra twin core cables.

Choose a good quality audio speaker cable of reasonable size. Avoid using cheap 'bell' or 'zip' cables. Audio speaker cable has a polarity stripe or rib along one conductor to simplify connecting your speakers.

Split the cable at each end to a depth of 25mm. Strip about 7mm of insulation from each end and lightly twist to gather the wire strands.

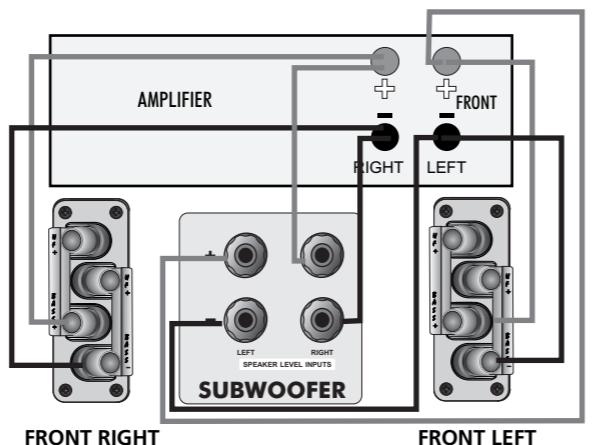
The Speaker Level connectors are screw terminals located on the control panel. Unscrew a terminal and insert the cable into the hole at the base. Re-tighten the terminal securely. Make sure that the terminal grips the bare wire and there are no loose strands which could touch adjacent terminals.



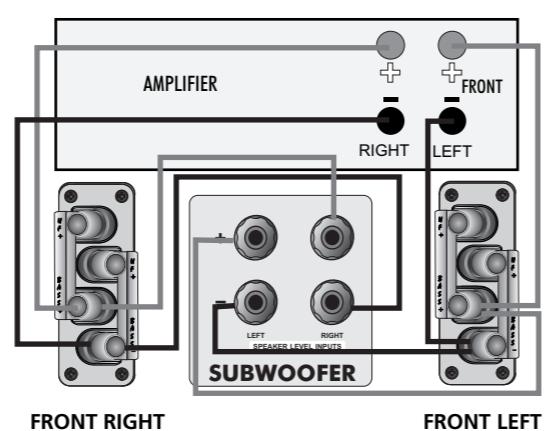
There are two methods of connecting the subwoofer:

A: Ensure the Front loudspeakers are correctly connected.

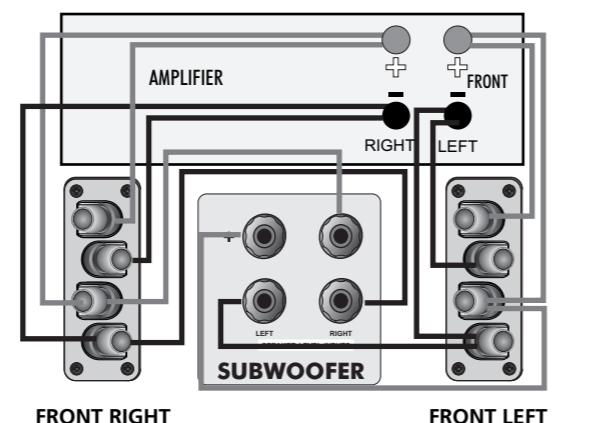
Using one of the additional twin core cables, connect the Left Speaker Terminals on the sub bass unit to the Front Left speaker terminals on the amplifier. Connect the Red (+) speaker terminal on the amplifier to the Red (+) terminal on the subwoofer. Connect the Black (-) speaker terminal on the amplifier to the Black (-) terminal on the subwoofer. Now connect the Right Speaker terminals on the subwoofer to the Front Right speaker terminals on the amplifier.



B: Alternatively you may connect the subwoofer to the Front speakers.



If your speakers are bi-wired: You should ensure that you connect the subwoofer to the BASS terminals ONLY.

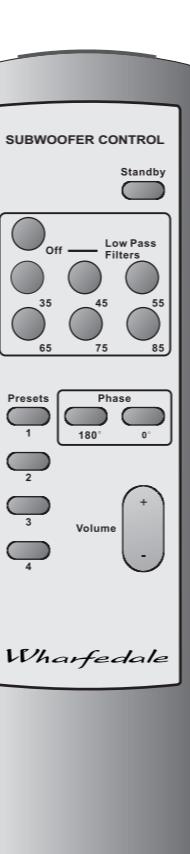


When routing any cables to loudspeakers do not run them across open floor spaces where they may cause danger to people and pets. Route them safely, around room boundaries if necessary.

OPERATING YOUR SUBWOOFER

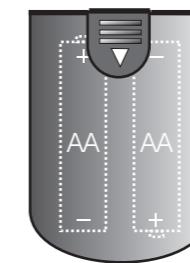
Remote Handset

All control functions are carried out using the remote handset.



Installing batteries

The handset operates on two LR6 (AA) batteries which are supplied. The battery compartment is located at the rear of the handset. Unwrap the batteries and slide the cover off the handset. Place the batteries in the handset, the correct orientation is shown on the diagram. When the batteries are installed, replace the cover.



Switching on the Subwoofer

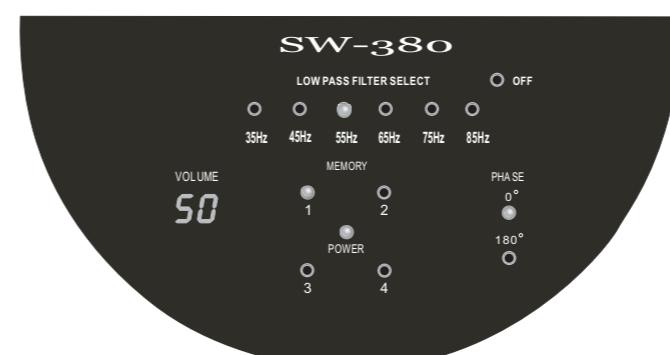
Check that all the connections to the subwoofer have been properly made and that the system volume control is at minimum. Plug the supplied power cord into the mains socket on the rear panel. Plug the mains plug into the wall socket and switch the power on. Now switch the subwoofer on with the rest of your system. The subwoofer on/off switch has a rocker action; press the upper part to switch the equipment on and the lower part to switch it off. When switched on the light above the power switch will glow and the subwoofer will be operational.

Operation - Controls and Functions

Control functions are carried out using the remote handset. To operate, the handset must be pointed at the subwoofer and be in direct line of sight.

Standby: The Standby key brings the subwoofer in and out of Standby.

The drawing below shows a typical front panel display during operation.



The preset light will not light if no preset has been set up or if a preset has been over-ridden.

In Standby mode all the lights on the subwoofer front panel are extinguished. The rear panel light remains on to show the unit is powered.

Volume: Press the Volume + key to increase the volume level. Press the Volume - key to decrease the volume level of the subwoofer. The volume range on the front panel display varies from 00 (minimum) to 99 (maximum).

Low Pass Filters: Pressing the appropriate filter key will select the frequency at which the subwoofer rolls off. The filter has steps at Off and 35Hz-85Hz in 10 Hz increments. When 'OFF' is selected the subwoofer operates over its full designed range. Pressing other keys lowers the maximum operating frequency. The Low Pass Filter value should be chosen having regard to the nature of the Front speakers and programme material. Follow the Setup Notes on Page 6 and the instruction manual of your AV processor (if used) for more guidance.

Phase: This key toggles the subwoofer between 0° and 180° phase shift.

Presets: Four different settings of level, frequency and phase can be stored. Pressing and holding any of the preset keys on the remote for 3 seconds will cause the current settings to be stored in that preset. The display will show the preset number then flash the preset number once to show it has stored the preset.

To change from one preset to another, press a preset key on the remote for less than 3 seconds to recall the settings of that preset. The display will show the preset number.

If you select a preset and then alter any aspect of the setup, the preset light will extinguish (as the setup no longer matches the preset).

Note: When brought out of standby for the first time, the unit will display the factory presets. Thereafter, bringing the unit out of standby will revert it to the operational state last used. If you switch the power on and off at the rear panel while the unit is in standby, the unit will power up to a normal operating state (i.e. not in standby). To enter standby, again press the Standby key.

SETTING UP YOUR SUBWOOFER

General Notes

Your subwoofer is most likely to be used with two typical programme sources, music and movies. The setup for these two very different sources may be different if best results are to be achieved. Please read these setup notes in conjunction with your processor and speaker manuals.

Setting up of the subwoofer should be performed with all tone controls and filters on the AV processor 'flat'.

Listening Rooms and Subwoofer Positioning:

Listening rooms are not ideal. Most rooms are reverberant with some parallel walls. Because of room geometry and construction there will be areas with severe peaks at some frequencies and severe troughs at others. These peaks and troughs are called 'standing waves' and if you site loudspeakers in such areas the response will be highly non-linear. With subwoofers this situation is exacerbated by the fact that it is easier to treat high frequency irregularities by the use of drapes, soft furnishings etc., but very hard to do the same at bass frequencies due to the very long wavelengths - at 40 Hz the wavelength is almost 9 metres!

To help locate standing waves in your listening room, one idea is to sit in the listening seat and recruit a friend with a deep voice to speak as he moves around the area where you propose to site your subwoofer - you will soon find out where not to site it! Where the voice sounds most natural is a good place to start.

The low frequency response of the subwoofer and its blend with the main loudspeakers is greatly affected by positioning. Although bass is enhanced by walls or corners, so often is coloration. As the drive unit faces downward, the floor will influence the sound. The surface under the subwoofer should be stable and unobstructed. If the carpet is thick, consider placing the subwoofer on a solid surface such as a marble slab.